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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/634,474	08/08/2000	Hugh C. Gardner	34,040.02	4456

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

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DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/634,474

Applicant(s)

GARDNER ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 8-10, 15, 16, 26, 27, 31, 32, 35, 36, and 38-59 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 8-10, 26, 27, 31, 32, 35, 36, 38 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15, 16 and 40-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Amendment B, submitted as Paper No. 6 on January 13, 2003, has been entered. The abstract has been amended as requested. Claims 18, 20, and 22 have been cancelled, while claims 15 and 16 have been amended. New claims 40-59 have been added. Claims 1-3, 8-10, 26, 27, 31, 32, 35, 36, 38, and 39 are withdrawn as being nonelected, while claims 15, 16, and 40-59 are pending for examination, with claims 15 and 52 being independent claims.
2. Amendment B is sufficient to the objection to the abstract set forth in section 9 of the last Office Action. Additionally, said amendment is sufficient to withdraw the 112, 2nd rejection and claim objections set forth in sections 11-13 of the last Office Action. Furthermore, the 102 rejection set forth in section 15 of the last Office Action is hereby withdrawn since Kimmel does not teach the presently claimed self-bonded or spunbonded nonwoven of continuous filaments needled to a support fabric (i.e., primary or secondary backing).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 15, 16, 40-43, 45, 46, and 52-55 are rejected under 35 USC 102(b) as being anticipated by US 4,242,394 issued to Leib et al.

Leib teaches a reinforced primary backing for a tufted pile fabric (abstract). Said reinforcing backing comprises a nonwoven capping layer of staple fibers, a reinforcing layer, and a woven backing (abstract, col. 2, lines 43-47). The capping layer is needled into and through the reinforcing layer and woven backing layer (abstract and col. 2, lines 33-38). The reinforcing layer may be a woven scrim or a spunbonded nonwoven comprising continuous filaments which are thermally bonded at the filament crossover points (col. 2, lines 48-63). The woven backing layer is a conventional primary backing of a woven scrim of polypropylene ribbon strands (col. 2, lines 64-68). Since (a) the ribbon strands inherently have a rectangular cross-section, (b) the reinforcing layer is needled together with the capping layer and the primary backing fabric, and (c) a spunbond nonwoven is needled to the woven primary backing layer, the Leib reference anticipates Applicant's claims 15, 16, 40-43, and 45. With respect to claims 46 and 52, it is asserted that the term "secondary backing" is merely descriptive of intended use. Structurally, a secondary backing made of yarns having a rectangular cross-section is no different from a primary backing made of yarns having a rectangular cross-section.

5. Claims 52, 54, and 55 are rejected under 35 USC 102(b) as being anticipated by US 4,069,361 issued to Kumar.

Kumar teaches a woven base fabric of polypropylene ribbons which has a layer of fusible staple fibers needlepunched thereto (col. 1, lines 58-66). The staple fibers are of a thermoplastic polymer which melts at a temperature less than the polypropylene ribbons (col. 2, lines 16-21). As noted above, the limitation to secondary backing is not given

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patentable weight at this time, since it is structurally equivalent to the primary backing taught by Kumar. Thus, claims 52, 54, and 55 are rejected as being anticipated.

6. Claims 52, 54, and 55 are rejected under 35 USC 102(b) as being anticipated by US 3,817,817 issued to Pickens et al.

Pickens teaches a secondary backing comprising woven base fabric of polypropylene ribbons which has a layer of fusible staple fibers needlepunched thereto (col. 2, line 68-col. 3, line 1). The base fabric may have a 12 x 8 construction, but Pickens teaches other known scrims useful as secondary backings may be employed (col. 3, lines 5-11). Thus, claims 52, 54, and 55 are rejected as being anticipated.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 47-50 and 56-59 are rejected under 35 USC 103(a) as being unpatentable over the cited Leib patent in view of US 4,138,519 issued to Mitchell.

Claims 56-59 are rejected under 35 USC 103(a) as being unpatentable over the cited Pickens patent in view of US 4,138,519 issued to Mitchell.

Although Leib and Pickens do not explicitly teach the claimed secondary backing leno weave substrate, said backing is well-known in the art of carpet. For example, Mitchell teaches a secondary backing for a tufted carpet comprising a leno weave fabric having 12-30 ends by 6-20 picks (col. 2, lines 50-61). Specifically, common secondary

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backings sold by Amoco Fabrics include Action Bac™ style 3800 having a 16 x 8 count, wherein the warp yarns are split polypropylene tape yarns and the weft yarns are spun yarns of polypropylene fibers (col. 3, lines 31-44). Thus, it would have been obvious to employ the conventional secondary backing of polypropylene tape yarns as warps and spun polypropylene yarns as wefts, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

Additionally, it would have been obvious to modify the number of picks per inch to 5, since it has been held that discovering an optimum value of a result effective variable involves only routing skill in the art. *In re Boesch*, 205 USPQ 215. For example, the choice of picks per inch would be mainly dependent upon the denier of the fill yarn employed and the desired basis weight of the fabric.

9. Claims 44 and 51 are rejected under 35 USC 103(a) as being unpatentable over the cited Leib patent in view of the cited Kumar patent.

Leib does not explicitly teach the claimed temperature difference. However, it is well known in the textile art to employ polymers differing in melting temperatures by at least 20 degrees when a fusible component is required, in order to melt and fuse the one fibrous component while preventing structural damage to the other fibrous component. For example, Kumar teaches the fusible staple fibers are of a thermoplastic polymer which melts at a temperature less than the polypropylene ribbons (col. 2, lines 16-21). Hence, it would have been obvious to one skilled in the art to employ the polymeric filaments of the structural woven primary backing which have a higher melting point that

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the other fibers of the composite fabric. Therefore, claims 44 and 51 are rejected as being obvious over the cited prior art.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



CHERYL A. JUSKA  
PRIMARY EXAMINER

cj  
March 24, 2003